

Tropical Cyclone *Quick Reference Guide* 2012

Fleet Weather Center - Norfolk, 9141 Third Ave, Norfolk VA 23511-2394

Operations Watchfloor: 757-444-7750 (DSN 564-7750)

NIPR email: fwc-norfolk.cdo@navy.mil SIPR email: fwc-norfolk.cdo@navy.smil.mil

(Public) <http://www.usno.navy.mil/NOOC/nmfc-n> (PKI) <https://nepoc.oceanography.navy.mil/portal/web/fwc>

(SIPR) <http://nepoc.oceanography.navy.smil.mil/portal/web/fwc>



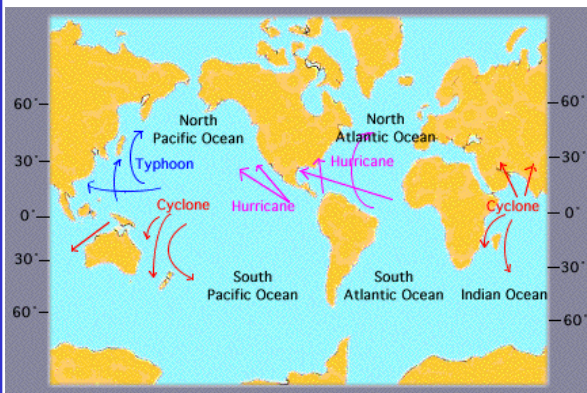
Atlantic Tropical Cyclone Season: 01 June - 30 November

East Pacific Tropical Cyclone Season: 15 May - 30 November

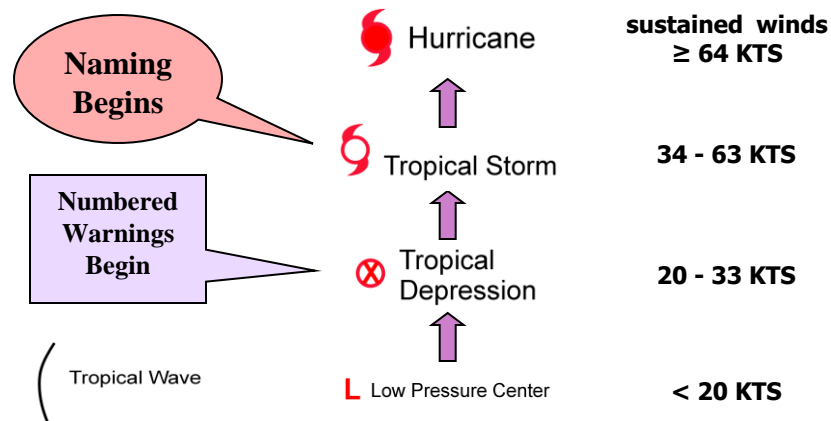
2012 Atlantic Tropical Cyclone Names

Alberto
Beryl
Chris
Debby
Ernesto
Florence
Gordon
Helene
Isaac
Joyce
Kirk
Leslie
Michael
Nadine
Oscar
Patty
Rafael
Sandy
Tony
Valerie
William

Tropical Cyclones: Development Areas and Movement



Stages of Tropical Cyclone Development



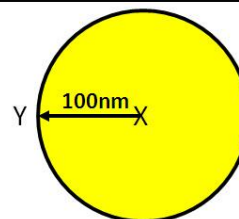
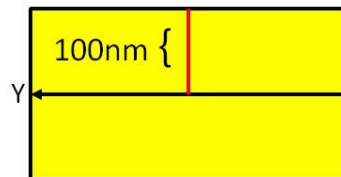
Saffir-Simpson Scale - Hurricane Destruction Potential

Category	Sustained Wind Speed (knots)	Sustained Wind Speed (mph)	Damage
1	64 - 82	74 - 95	Minimal
2	83 - 95	96 - 110	Moderate
3	96 - 113	111 - 130	Extensive
4	114 - 135	131 - 155	Extreme
5	> 135	> 155	Catastrophic

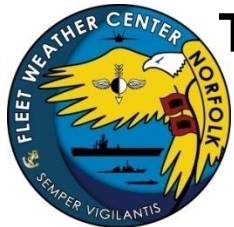
NOTE: Categories 3, 4, & 5 are considered **MAJOR** hurricanes

Tropical Cyclone Formation Alert (TCFA)

TCFAs provide early notification of likely TC development to the Fleet and help minimize the number of OTSR Advisories and Diverts



Tropical cyclone formation possible between positions X and Y within 24 hrs



Tropical Cyclone *Quick Reference Guide* 2012

Fleet Weather Center - Norfolk, 9141 Third Ave, Norfolk VA 23511-2394

Operations Watchfloor: 757-444-7750 (DSN 564-7750)

NIPR email: fwc-norfolk.cdo@navy.mil SIPR email: fwc-norfolk.cdo@navy.smil.mil

(Public) <http://www.usno.navy.mil/NOOC/nmfc-n> (PKI) <https://nepoc.oceanography.navy.mil/portal/web/fwc>

(SIPR) <http://nepoc.oceanography.navy.smil.mil/portal/web/fwc>



Tropical Cyclone Conditions of Readiness (TC-CORs)

(time until the forecast onset of destructive winds)*

COR V	96 hours
COR IV	72 hours
COR III	48 hours
COR II	24 hours
COR I	12 hours

* Destructive winds are defined as sustained winds \geq **50 KTS**

Fleet Sortie Conditions

Charlie - Prepare to sortie within **48 hours**
Bravo - Expected sortie within **24 hours**
Alpha - Commence sortie to sea

Aircraft Evacuation Status Reports

(required at the following times)

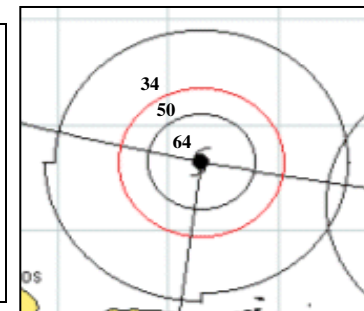
72 hours
48 hours
24 hours
12 hours

Environmental Requirements for Tropical Cyclone Development

- **Sea Surface Temperature $> 26^{\circ}\text{C}$ (78°F)** with sufficient depth (approx 200ft) of warm water
- **Pre-existing disturbance** to trigger thunderstorm activity (frontal boundary, easterly wave, distal low pressure, etc...)
- **Divergence** at the Upper Levels (above the 400 mb level or about 24,000ft)
- **Coriolis Force** (Ample Planetary Vorticity) will generally be sufficient at latitudes poleward of 8 degrees North/South
- **Weak ($< 20\text{kts}$) vertical wind shear** between the surface and upper troposphere
- **Relatively moist layers at the mid-levels** (about the 700mb level / 10,000 ft)
- System embedded in a potentially **unstable air mass**

KEY TO TROPICAL CYCLONE WARNING GRAPHICS

The **black** and **red** lines around a projected tropical cyclone track indicate the **34-knot, 50-knot, and 64-knot wind radii** associated with the storm at a given point. The outermost black line indicates the **34-knot** radius; the red line indicates the **50-knot** radius; and the inner black line shows the **64-knot** radius. Not all tropical cyclones will have peak central winds that reach the **50-knot** or **64-knot** threshold; as a result, weaker storms may not have a **50-knot** or **64-knot** wind radius. The size of the storm's forecast wind field will be indicated by the radius of each quadrant in the associated tropical cyclone warning message.



NFAAS standardizes a method for the Navy to account, assess, manage, and monitor the recovery process for personnel and their families affected and/or scattered by a wide-spread catastrophic event. The NFAAS provides valuable information to all levels of the Navy chain of command, allowing commanders to make strategic decisions which facilitate a return to stability.

NFAAS allows Navy Personnel to do the following:

- Update Contact/Location information
- Complete Needs Assessment
- View Reference Information

NFAAS Website --- <https://www.navyfamily.navy.mil>